

Amended Claims

Claims 1-84. **(Canceled)**.

85. **(Currently amended)** A method for administration of a substance to a mammal,
wherein:

the method **comprises comprising** injecting the substance into the dermis of the
mammal by bolus administration, ~~wherein~~

improved systemic absorption is produced relative to absorption **that would be**
produced upon injecting the substance subcutaneously by bolus administration, and ~~wherein~~
the substance is a low molecular weight heparin or a dopamine receptor agonist.

Claim 86. **(Canceled)**.

87. **(Previously presented)** The method of claim 85 wherein the substance is a low
molecular weight heparin.

88. **(Previously presented)** The method of claim 85 wherein the substance is a
dopamine receptor agonist.

89. **(Previously presented)** The method of claim 85 wherein the substance is in the
form of nanoparticles.

90. **(Previously presented)** The method of claim 85 wherein the injecting is through
at least one hollow needle, by electroporation, or by thermal poration.

91. **(Previously presented)** The method of claim 90 wherein the injecting is through
at least one hollow needle.

92. **(Previously presented)** The method of claim 91 wherein the at least one hollow needle comprises an array of microneedles.

Claim 93. **(Canceled)**.

94. **(Previously presented)** The method of claim 85 wherein the substance is administered by repeated bolus injections.

95. **(Currently amended)** A method for administration of a substance to a mammal, wherein:

the method comprises comprising selectively injecting the substance into the dermis of the mammal by bolus administration to obtain systemic absorption of the substance from the dermis, ~~wherein~~

improved systemic absorption is produced relative to absorption that would be produced upon injecting the substance subcutaneously by bolus administration, and ~~wherein~~ the substance is a low molecular weight heparin or a dopamine receptor agonist.

96. **(Previously presented)** The method of claim 95 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

97. **(Previously presented)** The method of claim 96 wherein selectively injecting the substance into the dermis is through at least one hollow needle having a length and outlet selected for their suitability for delivering the substance into the dermis to obtain systemic absorption of the substance from the dermis.

Claim 98. **(Canceled)**.

99. **(Previously presented)** The method of claim 95 wherein the substance is a low molecular weight heparin.

100. **(Previously presented)** The method of claim 95 wherein the substance is a dopamine receptor agonist.

101. **(Previously presented)** The method of claim 95 wherein the substance is in the form of nanoparticles

102. **(Previously presented)** The method of Claim 97 wherein the at least one hollow needle comprises an array of microneedles.

Claims 103 and 104. **(Canceled)**.

105. **(Previously presented)** The method of claim 95 wherein the substance is administered by repeated bolus injections.

106. **(Currently amended)** A method for administration of a substance to a mammal, **wherein:**

the method **comprises** ~~comprising~~ selectively injecting the substance into the dermis of the mammal by bolus administration, ~~wherein~~

improved systemic absorption of the substance is produced relative to absorption **that would be** produced upon injecting the substance subcutaneously by bolus administration, and ~~wherein~~

the substance is a low molecular weight heparin or a dopamine receptor agonist.

107. **(Previously presented)** The method of claim 106 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

108. **(Previously presented)** The method of claim 107 wherein the method comprises selectively injecting the substance into the dermis through at least one hollow

needle having a length and outlet selected for their suitability for delivering the substance into the dermis.

Claim 109. **(Canceled)**.

110. **(Previously presented)** The method of claim 106 wherein the substance is a low molecular weight heparin.

111. **(Previously presented)** The method of claim 106 wherein the substance is a dopamine receptor agonist.

112. **(Previously presented)** The method of claim 106 wherein the substance is in the form of nanoparticles.

113. **(Previously presented)** The method of claim 107 wherein the at least one hollow needle comprises an array of microneedles.

Claims 114 and 115. **(Canceled)**.

116. **(Previously presented)** The method of claim 106 wherein the substance is administered by repeated bolus injections.

Claims 117 and 118. **(Canceled)**

119. **(Currently amended)** A method for administering a substance to a mammal, **wherein:**

the method **comprises** ~~comprising~~ selectively delivering the substance to the dermis by bolus administration to achieve improved systemic absorption as compared to systemic absorption **that would be** produced upon bolus subcutaneous administration of the substance at an identical dose, **and wherein**

the substance is a low molecular weight heparin or a dopamine receptor agonist.

Claim 120. **(Canceled)**.

121. **(Previously presented)** The method of claim 119 wherein the substance is a low molecular weight heparin.

122. **(Previously presented)** The method of claim 119 wherein the substance is a dopamine receptor agonist.

123. **(Previously presented)** The method of claim 119 wherein the substance is in the form of nanoparticles.

124. **(Previously presented)** The method of claim 119 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

125. **(Previously presented)** The method of claim 124 wherein the delivering is through at least one hollow needle.

126. **(Previously presented)** The method of claim 125 wherein the at least one hollow needle comprises an array of microneedles.

Claim 127. **(Canceled)**.

128. **(Previously presented)** The method of claim 119 wherein the substance is administered by repeated bolus injections.

129. **(Currently amended)** A method for administering a substance to a mammal, wherein:

the method ~~comprises~~ **comprising** selectively delivering the substance to the dermis by bolus administration, ~~wherein~~

improved systemic absorption is produced as compared to systemic absorption that would be produced upon bolus subcutaneous administration of the substance at an identical dose, and ~~wherein~~

the substance is a low molecular weight heparin or a dopamine receptor agonist.

Claim 130. **(Canceled)**.

131. **(Previously presented)** The method of claim 129 wherein the substance is a low molecular weight heparin.

132. **(Previously presented)** The method of claim 129 wherein the substance is a dopamine receptor agonist.

133. **(Previously presented)** The method of claim 129 wherein the substance is in the form of nanoparticles.

134. **(Previously presented)** The method of claim 129 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

135. **(Previously presented)** The method of claim 129 wherein the delivering is through at least one hollow needle.

136. **(Previously presented)** The method of claim 135 wherein the at least one hollow needle comprises an array of microneedles.

Claim 137. **(Canceled)**.

138. **(Previously presented)** The method of claim 129 wherein the substance is administered by repeated bolus injections.

139. **(new)** The method of claim 85, wherein the ratio of the C_{\max} produced by the dermis administration to the C_{\max} that would be produced by the subcutaneous administration is at least about 2.2.

140. **(new)** The method of claim 139, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.

141. **(new)** The method of claim 85, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.

142. **(new)** The method of claim 85, wherein:
the composition comprises a low molecular weight heparin, and
the low molecular weight heparin comprises dalteparin.

143. **(new)** The method of claim 142, wherein the ratio of the C_{\max} produced by the dermis administration to the C_{\max} that would be produced by the subcutaneous administration is at least about 2.2.

144. **(new)** The method of claim 143, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.

145. **(new)** The method of claim 142, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.